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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,889	11/07/2001	Mark A. Boike	5201-25100 01-545	1135

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EXAMINER

KIM, HAROLD J

ART UNIT PAPER NUMBER

2182

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/045,889

Applicant(s)

BOIKE ET AL.

Examiner

Harold Kim

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-21 are presented for examination.
2. The abstract of the disclosure is objected to because it is not in proper abstract language and format. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to **150** words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-7 and 11-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Shephard, III, US Patent no. 6,553,525.**

5. In re claim 1, Shephard, III shows a computer system [figs 1 and 3] comprising:

6. a host processor [second line of Abstract];
7. a plurality of memory devices [102, 104 in fig 1];
8. an interface [112 in fig 1] interposed between the host processor and the plurality of memory devices, wherein the interface comprises:
 9. a data control register [308 in fig 3] comprising a plurality of select bits [308, D+1 bits] corresponding to the plurality of memory devices, and such that write access to a specific one of the plurality of memory devices is enabled if a corresponding one of the plurality of select bits is set [col 3, lines 17-25]; and
 10. a control register [302 in fig 3] comprising a plurality of control bits corresponding to the plurality of memory devices, wherein the state of the control bits are set by the host processor to enable the control bits to be copied to the select bits.
11. In re claim 2, Shephard, III shows the host processor enables write access to any combination of the plurality of memory devices by setting the corresponding control bits and then copying the control bits to the select bits [302, 314, 316, 320, 318 in fig 3].
12. In re claim 3, Shephard, III shows after enabling write access to the combination of memory devices, the host processor writes data simultaneously to the entire combination of write enabled memory devices [col 3, lines 17-25].
13. In re claim 4, Shephard, III shows each of the plurality of memory devices comprises both an instruction memory device [300] and a data memory device [310], and wherein an extended memory bit [302] in the control register selects either instruction memory devices or the data memory devices to be write enabled when the corresponding data control bits are set [308].

Art Unit: 2182

14. In re claim 5, Shephard, III shows a plurality of secondary processors [336] such that a specific one of the plurality of instruction memory devices and a specific one of the plurality of data memory devices is coupled to each of the plurality of secondary processors.

15. In re claim 6, Shephard, III shows the host processor is adapted to load the instruction memory coupled to any of the plurality of secondary processors with program instructions executable by said secondary processor [col 4, lines 32-56].

16. In re claim 7, Shephard, III shows a write enable bit [col 4, line 11] within the control register enables the copying of the control bits to the select bits.

17. In re claim 11, Shephard, III shows an instruction decoder [314, 304, 300 in fig 3], such that setting the state of the control bits and copying of the control bits to the select bits occur when the instruction decoder responds to a command issued by the host processor to the interface [320].

18. In re claim 12, Shephard, III shows the command is issued solely by the host processor absent any commands issued by the interface [320]

19. In re claims 13-19, Shephard, III teaches the apparatus to carry out the operations as set forth in claims 1-7 and 11-12. Therefore, Shephard, III also teaches the method steps in using the apparatus.

20. In re claims 20-21 are rejected under the same rationale as discussed above in claims 1-7 and 11-12.

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

23. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shephard, III, US Patent no. 6,553,525, as applied to claims 1-7 above.

24. In re claim 8, and 10, Shephard, III fails to teach a peripheral devices, including serial ports and a direct memory access controller, digital signal processors operatively coupled to each of the plurality of secondary processors, and digital signal processors. Official Notice is taken that both the concept and the advantages of providing for peripheral devices, including serial ports and a direct memory access controller, and digital signal processors are old and well known in the art. Therefore, it would have been obvious to the ordinary skilled person in the art at the time the invention was made to include the peripheral devices, including serial ports and a direct memory access controller, operatively coupled to each of the plurality of secondary processors, and digital signal processors for user friendly and more flexible device by allowing it to operate in multiple configurations.

Art Unit: 2182

25. In re claim 9, Shephard, III shows that all share a monolithic semiconductor substrate [col 2, lines 53-58].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Further references of interest are cited on Form PLO-892, which is attachment to this office action.

Any response to this action should be mailed to:

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P.O. Box 1450
Alexandria, VA 22313-1450

The centralized fax number is 703 872-9306.

The centralized hand carry paper drop off location is:

U.S. Patent and Trademark Office
2011 South Clark Place
Customer Window
Crystal Plaza Two, Lobby, Room 1B03

Any inquiry of a general nature or relating to the status of this application should be directed to the technology center receptionist whose telephone number is (703) 306-5631.

Direct any inquiries concerning drawing review to the Drawing Review Branch (703) 305-8404.

Art Unit: 2182

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold Kim whose telephone number is (703) 305-1948.

The examiner can normally be reached on Monday-Thursday 6 AM - 4:30 PM.

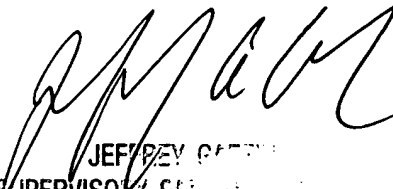
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (703) 308-3301.

HK

Harold J. Kim

Patent Examiner

March 18, 2004/HK


JEFFREY GAFFIN
SUPERVISOR, PATENT EXAMINERS
TECHNOLOGY CENTER